

Comments Regarding Public Comment by Lamm October 5th, 2005
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I have reviewed carefully both the Wu et al, 1989 and Chen et al, 1992 papers that S. Lamm compared in his October 5th, 2005 Public Comment. He summarized the results in a table titled: Analytic Study Sizes of Wu (1989) and Chen (1992) (which I refer below as the Table).

Several points need to be noted:

- a) The PYs at Risk for Females from Chen 1992 are incorrectly entered in the Table as 461,633. The correct number is 431,633.
- b) The PYs at Risk for Males and Females from Wu 1989 entered in the Table correspond to the total population (by gender) in exposure groups <0.30 ppm from Wu. Dr. Lamm appears to have incorrectly used it, as if it were the total population (by gender) >20 years of age across all exposure groups.
- c) The person-years in both papers are the same. The number of cancer cases are in fact different. BUT in Chen et al, the cancers are grouped by age groups, and for the <30 years of age (not <20), across all exposure groups, the following can be derived:

N = 6 for liver cancer

N = 5 for lung cancer

N = 0 for bladder cancer

N = 0 for kidney cancer (not included in Lamm's table)

- d) In Wu et al, the authors state in the Methods section: "Only a few or no deaths were observed among age group <20 years". Therefore the analysis performed by Lamm to derive "pediatric cancers" is contrary to the data and information presented in both papers.
- e) The difference Lamm notices in number of cases is probably mostly attributed to the explanation given by Chen, in the Methods section: "As some study subjects died from more than one primary cancer, all primary cancers enlisted in death certificates were coded and analyzed". This leads to believe that some individuals were counted more than once, under different cancers (I think some of these may be secondary cancers that were miscoded, but there is no way to know that for sure based on the papers).

For example, Lamm calculated 28 liver cancers in the "<20 age group" (his "Chen minus Wu"); since there are 6 liver cancers in the <30 age group in Chen., it is possible that up to 22 cases were either secondary or multiple primaries. Furthermore, the 6 liver cancers are very likely in the 20-30 year group, and not in the <20.